

-----Original Message-----

From: Kasper, Roger A DATCP [mailto:Roger.Kasper@datcp.state.wi.us]  
Sent: Friday, December 06, 2002 2:21 PM  
To: Hadjy, Pandor  
Subject: Comments on Implementation of Section 9006 of the Farm Security and Rural Investment Act of 2002, "Expanding Rural Renewable...

Pandor Hadjy, Assistant Deputy Administrator, Business Programs  
RBS, Room 5050 South Agriculture Building, Stop 3220  
1400 Independence Avenue, SW.  
Washington, D.C. 20250-3220

RE: Comments on Implementation of Section 9006 of the Farm Security and Rural Investment Act of 2002, "Expanding Rural Renewable Energy Systems"

The following Wisconsin organizations have reviewed and provided input to the document below:

Wisconsin Department of Administration (DOA)  
+ Wisconsin Focus on Energy - Production Agriculture Program  
+ Wisconsin Focus on Energy - Rural Communities Program  
+ Wisconsin Focus on Energy - Renewable Energy Program

Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP)  
+ Rural Electric Power Service (REPS) program  
+ Agricultural Development and Diversification (ADD) program

DATCP administers two programs that relate to rural energy: one program is the Rural Electric Power Service (REPS) program and the other is the Agricultural Development and Diversification (ADD) program. DATCP also supports a citizen advisory council called the Rural Energy Management Council (REMC). In addition, the Wisconsin Focus on Energy Program, an energy efficiency and renewable energy program funded by electric utility customers and managed by DOA has established programs in all three areas included in Section 9006, namely renewable energy, agriculture-based energy efficiency and rural communities. These activities have given us a chance to work with a variety of the agencies and individuals interested in rural energy issues in Wisconsin. These comments reflect the knowledge we have of the status of rural energy management in Wisconsin and the ways the USDA program could partner with the Wisconsin programs and achieve even greater public benefits.

Your original question and statement are in ALL CAPITAL letters; DATCP's suggestions and discussion follow each question.

Questions or concerns with regarding these comments can be directed to

Roger Kasper, DATCP-Rural Electric Power Service (REPS) program at  
roger.kasper@datcp.state.wi.us or 608/224-5054

Or

Preston Schutt, DOA-Division of Energy at  
preston.schutt@doa.state.wi.us or 608/261-8658

Or

Don Wichert, DOA-Division of Energy at don.whicert@doa.state.wi.us or  
608/266-7312

Thank you for considering our input in the drafting of the rules to

implement Section 9006 of the Farm Security and Rural Investment Act of 2002.

Roger Kasper, Preston Schutt, Don Wichert

WISCONSIN'S RESPONSE TO USDA ISSUES:

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"RBS IS PARTICULARLY INTERESTED IN RECEIVING COMMENTS ON THE FOLLOWING SPECIFIC ISSUES AS THEY RELATE TO SECTION 9006:

1. THE ACT STIPULATES THAT FINANCIAL ASSISTANCE MAY BE PROVIDED TO PURCHASE RENEWABLE ENERGY SYSTEMS AND MAKE ENERGY EFFICIENCY IMPROVEMENTS.

~ WHAT PROJECTS SHOULD BE ELIGIBLE FOR FUNDING? & SHOULD CERTAIN TYPES OF PROJECTS RECEIVE PRIORITY FOR FUNDING?

Suggestions:

1. Earmark at least 50% of the money for energy efficiency improvements and the remainder to new renewable energy projects.

2. Require eligible projects to have an energy assessment/audit and energy management plan.

3. Take an overall "systems" approach to funding energy efficiency and renewable energy projects, NOT simply funding a new "technology" approach (e.g. funding just new type of light purchase and not system upgrades to handle new lights safely and efficiently).

Discussion:

Both renewable energy systems and energy efficiency improvements could benefit eligible participants and should be eligible for funding, but they are not necessarily the ones who can afford the risks of unproven or new applications of existing technology. Some are going to be able and willing to take the risk of being an early adopter of an unproven system or located so that they can take advantage of proven renewable energy technologies (e.g. wind), but we feel a majority are more likely not. Therefore, we suggest ear marking at least 50% of the money for energy efficiency improvements and the remainder to new renewable energy systems.

Just adding the most recent renewable energy or energy efficiency technologies to a hodgepodge of systems is not necessarily in the best overall interest of the operation. Systems that have been built up over time, often in response to emergency needs, may have hidden safety issues and are probably not designed with energy efficiency in mind. Many farm operators need encouragement to spend more time and resources in getting outside expert planning guidance for the energy management of the overall operations.

The effort to look at all energy usage requirements of the operation and planning for overall system upgrades is absolutely necessary to ensure a safe and efficient system. Important safety and power quality concerns (e.g. stray voltage, excessive secondary voltage drop, wiring failures in process, etc.) are often identified during this review process. Regardless of whether the operator proceeds with funding the improvements or changes at the time, the farmer has an outline of safety, efficiency and alternative renewable energy concerns and options they face and a plan for future reference to prioritize possible improvements or energy efficient replacement purchases of failed equipment.

We feel an energy assessment/audit that investigates both renewable energy and energy efficiency options, along with an energy plan, should be required of projects requesting assistance under section 9006. The nature of the

assessment/audit should be focused on energy efficiency first, then renewable energy options. The energy assessment/audit should make simplified estimates of savings - not detailed audits based on complex monitoring - a sure way to waste program funds. The overall assessment/audit should be based on an Identification (ID) survey that utilizes basic farm factors to estimate energy cost and saving potential for system efficiency improvements and renewable energy systems.

We realize section 9005 of the bill was to cover these audits, but funding of these services is unknown at this time. There are alternative providers of assessments/audits and plans and the section 9006 program should accept 3rd party assessments/audits and plans. Knowledgeable third parties that could potentially provide these services are state energy programs, county or state extension services, private energy management consulting firms and some utilities.

Often maximum effective improvements are more than just buying a "new piece" of equipment (e.g. upgrade utility service to 3-phase power, rewiring farmstead to modern standards, relocating ventilation / lighting equipment within structures, etc.). The allowable expenses should NOT be just for the "new" piece of equipment; rather, it should also cover overall system changes required to take full advantage of all potential energy savings for the system.

An example would be the conversion from standard, incandescent lighting to energy efficient lighting at a location that needs rewiring before considering any change. An extra \$10,000 to \$20,000 may allow the upgrade so that the operator could take advantage of the much more efficient lighting option. If this additional cost is not covered, the operator may not be able to afford the overall changes required to be as energy efficient as possible. The upgrading/extending of 3-phase service has also been an issue with the ability to connect wind turbines more efficiently to the utility grid. Many other examples exist of the need to upgrade, rewire or modify the operations to take full advantage of energy efficiency improvements or adopt a renewable energy system.

A basic benefit cost ratio should be required when evaluating the grant or loan amount that pays for a "system" expansion that does not directly lead to energy efficiency. It is possible that these system expansions will subsidize non-energy efficiency and renewable energy technologies. To ensure the good use of program funds, a ceiling should be placed on "indirect" or "system" upgrades.

~ SHOULD PREFERENCE BE GIVEN TO NEW, INNOVATIVE TECHNOLOGIES OR PROVEN TECHNOLOGIES?

Suggestions:

1. All potentially 'viable' project technologies should have a chance to participate in the program. However, there should be a reasonable maximum allowable payback criteria established (e.g. projects more than a 10- to 15-year simple payback are NOT eligible).

Discussion:

Due to the limited annual funding for section 9006, we believe that any renewable energy or energy efficiency projects should NOT be eligible for a grant, if the payback is two years or less OR greater than ten to fifteen years. Projects with paybacks greater than ten to fifteen years should not be funded. It is our understanding that the goal of this USDA program is to

maximize current implemented energy savings and adoption of renewable energy. The USDA should encourage innovation; however, it should rely on other programs and efforts to establish the market viability of new technologies before allowing them to access funds through this program.

Appropriate USDA or DOE authorities will need to determine which technologies constitute a 'viable option'. The funding of "zero point energy", perpetual motion or other questionable systems should be discouraged as they are not likely to benefit the farmers or businesses involved with the program.

Below are examples of technologies that might be considered either "proven" or "new technologies".

"Proven 'off-the-shelf' technologies"

- ~ Most lamps and lighting systems
- ~ Variable speed fans
- ~ Milk system pre-coolers
- ~ High-volume low-speed fans in livestock housing areas
- ~ Efficient stock watering systems
- ~ Large wind turbines (100 kW or greater)
- ~ Solar electric fences or water pumps
- ~ NEMA Premium electric motors
- ~ Low pressure irrigation

"New or Innovative Technologies"

- ~ Anaerobic digestion of manure (biogas) [Still site by site adoption.]
- ~ Variable frequency dairy vacuum pumps (Not necessarily new or innovative, however, they still should be considered on a site-by-site basis)
- ~ On-farm biodiesel, ethanol or other alternative fuel production
- ~ On-farm palletizing or other advance packaging of biomass materials for fuel
- ~ Combined heat and power systems
- ~ Small wind turbines (less than 100 kW)
- ~ On-farm gasification or pyrolysis operations
- ~ Solar drying of products in northern climates
- ~ Waste-heat recovery by evaporative chilling systems

2. LOAN GUARANTEES, DIRECT LOANS, AND GRANT PROGRAMS ARE AUTHORIZED UNDER THE LEGISLATION.

~ WHAT TYPE OF FINANCIAL ASSISTANCE IS MOST IN NEED (I.E., GRANTS, DIRECT LOANS, OR LOAN GUARANTEES)?

Suggestions:

1. Grants, direct loans and or loan guarantees are all useful for specific technology market stages - e.g., "new, innovative" or "proven".
2. Maximize grant size for early adopter or innovator of a system that is unproven or has limited-adoption. Grants should be most generous for new, innovative technologies.
3. Require individual or local/state programs to cover the cost of a third party assessment/audit and energy plan.
4. No grant money should be awarded to projects that have an economic payback less than two years. In these situations direct loans or loan guarantees should be used.

Discussion:

As stated before, eligible farmers and small businesses are not necessarily the ones who can afford to be "guinea pigs", but some are going to be able and willing to take the risk of being an early adopter or innovator of an unproven or limited adopted system. These individuals should receive the maximum grant assistance in addition to loans to help balance some of the risk of being an early adopter or innovator.

States should demonstrate their commitment to energy efficiency by covering the cost of a third party assessment/audit and energy plan. In this way the USDA would be assuming a leadership position by encouraging States to actively participate.

4. SECTION 9006 STATES THAT, IN DETERMINING THE AMOUNT OF GRANT OR LOAN, THE SECRETARY SHALL TAKE INTO CONSIDERATION AS APPLICABLE:

G. OTHER FACTORS AS APPROPRIATE.

~ WHAT OTHER FACTORS, IF ANY, SHOULD THE DEPARTMENT CONSIDER IN DETERMINING THE AMOUNT OF GRANT OR LOAN?

Suggestions:

1. We agree an element of eligibility should be "financial need" and suggest the minimum be conforming to the FSA direct loan program eligibility requirements.
2. We encourage the adoption of the definition of a small rural business that appears in the Rural Business Enterprise Grant program.
3. Renewable energy projects should have a maximum award of no greater than \$100,000 and energy efficiency projects should have a maximum award of \$25,000.

Discussion:

Section 9006(b)(a) directs the USDA Secretary to determine what qualifies as "demonstrate(d) financial need". We did not find "financial need" defined anywhere in the Act. We agree an element of eligibility should be "financial need".

The baseline requirements of any participant for financial assistance should be defined by adopting these existing requirements:

- a. The FSA direct loan program eligibility requirements
  - b. The 2002 Farm Bill stipulation, being used in other programs, that individuals and entities whose average Adjusted Gross Income (AGI) exceeds \$2.5 million are ineligible unless at least 75 percent of their average AGI is derived from farming, ranching or forestry operations.
- We would accept additional requirements if easily determined such as a specific ratio of energy expenditure to AGI as a measure of "financial need".

"Rural small business" does not seem to be defined by the act. We encourage the use of the definitions from the Rural Business Enterprise Grant (RBEG). Section 1942.304 of instructions defines a small and emerging private business enterprise as "Any private business which will employ 50 or fewer new employees and has less than \$1 million in projected gross revenues." Rural and rural area are defined as "\* \* that is not within the outer boundary of any city having a population of 50,000 or more and its immediate adjacent urbanized and urbanizing areas with a population density of more than 100 persons per square mile, \*"

4. THE ACT STATES THAT THE AMOUNT OF GRANT SHALL NOT EXCEED 25 PERCENT OF

THE COST OF THE ACTIVITY FUNDED UNDER THE PROGRAM. ADDITIONALLY, THE COMBINED AMOUNT OF A GRANT AND LOAN MADE OR GUARANTEED SHALL NOT EXCEED 50 PERCENT OF THE COST OF THE ACTIVITY FUNDED.

~ WHAT ARE VARIOUS SOURCES OF PROGRAM MATCHING FUNDS (I.E., OTHER FEDERAL, STATE, LOCAL, OR PRIVATE PROGRAMS)?

Suggestions:

1. Most residents of the State of Wisconsin have opportunity for some matching funds from a variety of available programs. In Wisconsin, availability of matching funds is determined by the nature of the programs their utility (investor owned, municipally owned or rural cooperative) have adopted and the business or farm operation.
2. Most Wisconsin dairy operations and some other agriculture operations are soon to have financial and technical assistance with rewiring of their operations. The type of financial assistance will consist of a combination of grants or loans to upgrade their existing wiring.
3. Projects receiving other financial assistance should NOT be excluded from eligibility for funding under section 9006. However, the total of all grants and loans, from federal, state, or local government should not exceed 50% of the total project cost.

Discussion:

Beneficial synergies exist for packaging assistance from multiple programs that can maximize the implementation of renewable energy systems and energy efficiency upgrades. Grants and loans, from all sources (federal, state and local), should not be greater than 50% of the total project cost. A project owner should be required to have a substantial financial commitment so that a "false" market is not created which is dependent on subsidies.

Most residents of the State of Wisconsin have the opportunity for some matching funds from a variety of available programs. The availability of matching funds in Wisconsin is determined by the nature of the program offered by electric providers (investor owned, municipal managed or rural cooperative) and the nature of the business or farm operation.

The State of Wisconsin enacted legislation to require investor owned utilities and municipals to participate in a uniform public benefit program managed by the state which is known as the "Focus on Energy" program. Focus on Energy manages a number of public benefit programs that include encouraging renewable energy, energy efficiency improvements and assistance with payment of energy bills. The 23 Wisconsin rural electric cooperatives were invited to participate in the State's Focus on Energy program or requested to offer a similar package of programs on their own. None chose to join the State's Focus on Energy program and instead fund their own programs, if any for these specific interest. Therefore, the available matching funds depend on the specific utility that provides the potential participant with electric power.

Further information on Focus on Energy program offerings:

Production agriculture energy efficiency incentive program.

<http://www.focusonenergy.com/data/common/pageBuilderFiles/1367775110MMfinancial.pdf>

Renewable energy investment incentives.

<http://www.focusonenergy.com/page.jsp?pageId=673>

Renewable energy feasibility and demonstration grants.

<http://www.focusonenergy.com/page.jsp?pageId=674>

Soon almost all dairy operations and some agriculture operations will have assistance in the form of grants, loans and technical assistance to rewire their operations to be safer more efficient operations. DATCP has partnered with the Wisconsin Public Service Commission and Department of Commerce - Office of State Electrical Inspector for many years to troubleshoot stray voltage, utility service problems and safety concerns. It has become obvious that a majority of rural and agriculture customers are desperately in need of assistance to upgrade their wiring system to have safer, more energy efficient electrical systems. The Public Service Commission has worked with all of the major investor owned utilities and the Wisconsin Rural Electric Cooperative Association to get fairly uniform rewiring programs offered across the state. Currently those farms receiving municipal power may not have access to a rewiring program.

Wisconsin Public Service Corp. developed the pilot farm-rewiring program that has been used as a model for the other investor owned utilities. The 4 other major investor owned utilities are at various stages of developing similar programs under the guidance of the WI Public Service Commission. The Wisconsin Rural Cooperative Association recently announced the Safety First program that will be very similar to that offered by Wisconsin Public Service Corp.

Each program has slight variations. Some are limited to only dairy operations others are all agriculture. Some offer more grant money or loans than the others do. Some will allow any certified electrical inspector to assess wiring others require a state electrical inspector. Overall they all provide varying levels of grant money for inspection, assessment and development of a plan with matching low interest loans up to some pre-determined maximum amount.

[Further information on model program at  
<http://www.wisconsinpublicservice.com/farm/rewiring.asp>]

Federal program funds should not exclude projects receiving local assistance. An efficient way to coordinate delivery of services would be for the USDA program to work with state and local programs to eliminate any "gaps" in geographic coverage, eligibility, program options, or cost effectiveness limits. Beneficial synergies exist with packaging assistance from multiple programs that can maximize the implementation of cost effective energy efficiency upgrades and renewable energy systems.